

Case Study

Job: Dingley Bypass Road, Melbourne, Australia
Total Area: 14,000 sqm.
Description: 5 km of road with one over pass bridge. Painting elements include: bridge piers, parapets, beams, abutments, crossheads, retaining wall and road safety barriers.
Constructor : Fulton Hogan
Asset Owner : Vic Roads



Fulton Hogan was awarded a contract to the new Dingley Bypass road in Melbourne, Australia. The road extended 5 km and included one bridge over Cheltenham Road. The job ran from 2011 and was completed in December 2012. Part of the contract was to paint all exposed concrete on the project along with a wooden retaining wall. The specification called for a coating system that was approved by Vic Roads for use a decorative, anti carbonation coating and permanent anti graffiti protection. Nanokote Pty Ltd proposed the ProGuard coating that can be applied directly to concrete in a one coat process to achieve the desired specification.

Normally to achieve the specification of being a permanent anti carbonation and permanent anti graffiti coating system the painting process involves the five steps below:

- 1) A high pressure wash
- 2) 24 hours later, a coat of pimer
- 3) 24 hours later, first coat of acrylic
- 4) 16 hours later, second coat of acrylic
- 5) 7 days later, a coat of 2 pack polyurethane

It was estimated that this process was going to require about 70 days work for a 3 man painting crew taking into account the work at height requirement when painting retaining wall and the bridge. Nanokote Pty Ltd, using our patent protected ProGuard coating was able to complete this work in 33 days using a 3 man painting crew. The coating process with ProGuard that allows this is as follows:

- 1) A high pressure wash
- 2) Direct application of ProGuard to damp concrete.
(even though ProGuard can be applied as a one coat process to concrete, Vic Roads specification calls for two coat wet on wet, 30 minutes apart)

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Nanokote Pty Ltd is a Division of Australian company Micronisers Pty Ltd. The Group of Companies are trail blazers in the field of nanomaterials in Australia. Nanokote specializes in providing finished coating materials in the form of specialised thin films, barrier coatings and functional coatings. We engineer and implement clever ways of enhancing the value of our customer's products which results in our customers increasing their competitive edge. Our products introduce ways of differentiating our customer products enabling premium prices, increased market share and strong returns on investment.